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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,423	03/19/2004	Monica DeGraffenreid	81087762	7209

28866 7590 10/12/2005

MACMILLAN, SOBANSKI & TODD, LLC  
ONE MARITIME PLAZA - FOURTH FLOOR  
720 WATER STREET  
TOLEDO, OH 43604

EXAMINER

LE, DAVID D

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 10/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/804,423

Applicant(s)

DEGRAFFENREID, MONICA

Examiner

David D. Le

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-11 is/are pending in the application.
- 4a) Of the above claim(s) 6-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This is the second Office action on the merits of Application No. 10/804,423, filed 19 March 2004. Claims 1 and 3-11 are pending. Claims 6-11 are withdrawn from further consideration, 37 CFR 1.142(b), as being drawn to a non-elected Species.

### Documents

2. The following documents have been received and filed as part of the patent application:
- Information Disclosure Statement, received on 03/19/04
  - Replacement Drawings, received on 08/04/05
  - Substitute Specification, received on 08/04/05

### Drawings

3. The replacement drawings were received on 04 August 2005. These drawings are disapproved.
4. The drawings, filed on 19 March 2004 are objected to because, in Fig. 4, reference number "48" should be --48'--. (See page 4, line 36, of the present specification)
5. The drawings, filed on 19 March 2004, are also objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the gear journalled on the layshaft and a second pinion journalled on the layshaft and secured to the gear must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

6. The substitute specification filed on 04 August 2005 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because: it fails to include a statement that the substitute specification includes no new matter.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 4,745,825 to Yamamoto in view of U. S. Patent No. 4,782,721 to Dick.**

*Claims 1 and 3-5:*

*Yamamoto* (i.e., Fig. 2; column 4, line 31 – column 7, line 36) discloses a transfer system comprising:

- An input (76);
- A first output (82);
- A speed reduction drive path (i.e., Fig. 2, being the low-speed operating mode) driveably connected to the input and first output, for driving the first output at a slower speed than a speed of the input;
- A coupler (i.e., element 108) for releaseably connecting the input and first output;
- A second output (128);
- A transfer drive (i.e., Fig. 2, being the combination of elements 120, 126, and 130) continually driveably connecting the first output and second output;
- A friction clutch assembly (i.e., Fig. 2, being the combination of elements 114, 116, 118, and 124) for releaseably connecting the speed reduction drive path and the transfer drive;

- Wherein the speed reduction drive path further includes a shaft portion (94) spaced laterally from the input, a pinion (90) rotatably secured to the input, a gear (92) secured on the shaft portion (94) and driveably connected to the pinion, a second pinion (96) secured on the shaft portion (94) and secured to the gear, a second gear (112) rotatably secured to the first output and driveably connected to the second pinion (i.e., Fig. 2);
- Wherein the second gear includes clutch teeth (i.e., Fig. 2, being the teeth of clutch element 114) and the coupler includes a hub (104) secured to the input and inherently including spline teeth formed at a radially outer surface, and a sleeve (108) supported on the hub for displacement relative to the hub and inherently including clutch teeth continually engaged with the spline teeth on the hub and alternately engaged with, and disengaged from the clutch teeth on the second gear as the sleeve moves on the hub (i.e., Fig. 2);
- Wherein the shaft portion (94) is spaced laterally from the input and the input and first output are coaxial, and the second output is spaced laterally from the first output (i.e., Fig. 2); and
- Wherein the transfer drive includes a first sprocket wheel (120) rotatably supported on the first output, a second sprocket wheel (130) secured to the second output, and a drive chain (126) driveably engaged with the first sprocket wheel and the second sprocket wheel.

*Yamamoto* lacks:

- A layshaft fixedly secured to a casing.

*Dick* (i.e., Fig. 3; column 3, lines 45-63), on the other hand, teaches a gear assembly comprising:

- An input shaft (i.e., Fig. 3, element 20);
- A pinion (i.e., Fig. 3, element 40) fixedly secured to the input shaft (20);
- A layshaft (i.e., Fig. 3, element 47) fixedly secured to a casing;
- A gear (i.e., Fig. 3, element 45) journaled on the layshaft (47) and driveably connected to the pinion (40); and
- A second pinion (i.e., Fig. 3, element 55) journaled on the layshaft (47).

It would have been obvious to one of ordinary skill in the art at the time this invention was made to modify *Yamamoto* such that the shaft portion (94), integrally connected gear (92) and pinion (96), is hollowed and journaled on a layshaft, which is fixedly secured to the casing, in view of *Dick*, for the reason that it would be cheaper to selectively replace just the damaged gear or the damaged shaft, instead of both, the gear and the shaft, even though only one of them needed to be replaced.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1 and 3-5 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Baxter, Jr. (U. S. Patent No. 5,954,612) teaches a multi-speed offset transfer case, as shown in Fig. 1.

11. Applicant's amendment, with respect to a gear and a second pinion being journalled on the layshaft, necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.




Art Unit: 3681

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 571-272-7092. The examiner can normally be reached on Mon-Fri (0700-1530).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
ddl

  
**CHARLES A. MARMOR**  
SUPERVISOR, PATENT EXAMINER  
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